



Western Beef Development Centre

IF YOU'RE THINKING OF PUTTING UP EXTRA FEED - CONSIDER CAIS FIRST!!!

Background

The decision of many cow-calf producers in the fall of 2003 was to hold their calves and take advantage of a high priced US market if the border opened in the coming months. Consequently, additional feed was "put up" wherever it could be found. Putting up the extra feed seemed reasonable at the time; however you may have received a larger 2003 CAIS payment had you purchased the feed instead. This article is intended to shed light on how the decision to put up extra feed vs. purchasing extra feed can impact your CAIS payment.

Section I of this article describes how a 2003 reference margin and claim year margin is calculated. Section II discusses how putting up extra feed in the claim year results in the margins earned in past reference years being increased. Finally, Section III focuses on the difference in CAIS payments a producer would receive if he were to purchase additional feed instead of putting it up himself.

Example Scenario

Peter is a cow-calf producer from the RM of Birtle in western Manitoba. His operation's size of 150 cows has remained constant from 1998 - 2003. In past years he has always produced 500 bales of hay/year on 275 acres of hay land. He does not usually begin feeding his cows until after the new year. All weaned calves have traditionally been sold in the fall and replacement breeding females are purchased as bred cows from a nearby neighbour.

Unlike past years, Peter did not sell his calves in the fall of 2003. He decided to background his calves and speculate on the US border opening in the coming months. During the fall of 2003 Peter baled an extra 500 hay bales (over an additional 275 acres of rented hay land) in order to have enough feed to background these calves. The calves consumed 200 hay bales by his fiscal year-end of December 31, 2003. As we all know, the border still has not opened. Peter sold his calves in March of 2004 and although he fared better than some of his other neighbours (as far as timing the market was concerned), he is now applying for a 2003 CAIS payment to help offset his losses.

SECTION I

Calculating Peter's 2003 Reference Margin

Peter's reference margin for 2003 is based on his margins for the five years prior to 2003 (1998 – 2002). The high and low margin years are removed and the three remaining years of margin are summed and

divided by three. His CAIS margins from 1998-2002 are as follows on a cash accounting system (i.e. CAIS eligible cash income less CAIS eligible cash expenses).

1998: \$44,559 1999: \$58,723 2000: \$58,982 2001: \$53,579 2002: \$64,650

Thus, the 2003 options notice sent to Peter would have indicated his estimated 2003 reference margin was \$57,094.67.

Calculating Peter's 2003 Claim Year Margin

CAIS calculates Peter's 2003 claim year margin (a.k.a. the production margin) on a modified accrual accounting system, meaning changes in crop and livestock inventories, purchased inputs, and accounts payable and receivable, are considered in the margin calculation along with CAIS eligible expenses and income. For this example we will assume Peter's accounts payable and receivable and purchased inputs for the year have remained constant.

No calf sales in 2003 resulted in Peter's CAIS eligible cash income being almost zero. His calculated CAIS cash margin for 2003 (i.e. CAIS eligible cash income less CAIS eligible cash expenses) turned out to be -\$46,556 (assume calculation is correct). However, when inventories are considered, his margin is much different. Listed below in Table 1 are Peter's 2003 inventory changes. He has had an increase in inventory of \$91,680 during 2003, and this combined with his cash margin of -\$46,556 makes his 2003 claim year margin \$45,124. The claim year margin of \$45,124 is lower than his 2003 reference margin of \$57,094.67 and thus it appears Peter will be in a claim position for 2003, even before changes in the productive capacity of his operation are considered.

Table 1. Peter's 2003 Inventory Changes

	# of Units Beginning	# of Units Ending	Change in Quantity	Fair Market Value/Unit	Total Inventory Change
Bred Cows	150	150	0	\$800	\$0
Steers 5-600 lbs	0	72	72	\$558	\$40,176
Heifers 5-600 lbs	0	72	72	\$507	\$36,504
Breeding Bulls	8	8	0	\$1,700	\$0
Hay Bales	500	800	300	\$50	\$15,000
Total Inventory Change					\$91,680

SECTION II

Productive Capacity of the Operation

CAIS refers to the expansion or downsizing of a farming operation as a change in the operation's **productive capacity**. CAIS monitors changes in productive capacity of the operation because it attempts to simulate each of the producer's past five years of margin to have the same level of productive capacity as the claim year (2003 in this example).

There are several indicators CAIS uses to monitor changes in productive capacity. For cow-calf producers, some of these indicators include acres of crops and forage the producer is farming, as well as the number of cows and bred heifers calving during the year. For those purchasing and selling feeder

cattle, CAIS also recognizes sales of feeder cattle above and below 900 lbs/head. Changes in productive capacity are measured by what is called a **structure calculator**.

Calculating Changes in Productive Capacity

When Peter sends in his claim for 2003, CAIS will compare his productive capacity from 1998 – 2002 vs. 2003, to determine if there have been any changes. In Peter’s case there has been a change in the productive capacity of his operation, as the number of acres he put up for hay in 2003 (550 acres) is double that of each of his reference years (275 acres).

CAIS multiplies each year’s difference in forage acres harvested by a **benchmark per unit (BPU)**. BPU’s are the average margins earned by producers in the particular region for each year from 1998 - 2002 for the commodity in question. There are BPUs calculated for all provinces and for all indicators recognized by CAIS (depending on the indicator, they can be municipal, regional or provincial in scope). In the RM of Birtle, the BPU’s per forage acre from 1998 - 2002 are listed in Table 2.

Table 2. RM of Birtle Benchmarks Per Forage Basket Acre

Year	1998	1999	2000	2001	2002
BPU Per Forage Acre	\$49.05	\$62.79	\$24.66	\$19.86	\$85.18

The difference in forage acres harvested is multiplied by the BPU per acre and then added to the margin already calculated for Peter, in each individual year. Therefore, the calculations in Table 3 are applied to each of Peter’s margins from 1998 - 2002. Column E of Table 3 indicates Peter’s new margins for each year after the structural adjustments have been calculated. Remember, structural adjustments are calculated because CAIS wants each of the past 5 years of margin to simulate the same level of productive capacity as experienced by Peter in 2003 (i.e. 550 acres of harvested hay acres). The number of cows calving has remained constant at 150 from 1998 - 2003 and therefore there are no structural adjustments applied to this portion of his operation.

Table 3. Peter’s Adjusted Margins After Considering Productive Capacity Changes

Year	A Cash Margins	B Difference in Forage Acres vs. 2003	C BPU/ Forage Basket Acre	D = B X C Structural Adjustment	E = A + D Adjusted Margins
1998	\$44,559	275	49.05	\$13,488.75	\$58,047.75
1999	\$58,723	275	62.79	\$17,267.25	\$75,990.25
2000	\$58,982	275	24.66	\$6,781.50	\$65,763.50
2001	\$53,579	275	19.86	\$5,461.50	\$59,040.50
2002	\$64,650	275	85.18	\$23,424.50	\$88,074.50

CAIS now again applies the Olympic average rule (i.e. the high and low margins are removed, and the 3 remaining margins are summed and divided by 3). The newly adjusted 2003 reference margin for Peter is now \$66,931.42. If CAIS detects more than a 5% change and \$1,000 difference between the structurally adjusted reference margin of \$66,931.42 and Peter’s original margin of \$57,094.67, the structural adjustment is applied. In this case both criteria would be met and the structural adjustment

upwards would be applied. Peter's claim year margin of \$45,124 is less than his newly adjusted reference margin of \$66,931.42 and as such the payment he will receive is approximately \$13,430 of government-funded CAIS support, assuming he had selected 92% coverage.

SECTION III

Purchasing Instead of Baling Extra Feed Could Affect CAIS Payments

What if Peter had not put up the extra feed and instead bought it? If he had only made 500 hay bales as usual and then purchased 500 extra bales at \$50/bale, this expense of \$25,000 would all be considered a CAIS eligible expense. In this example his CAIS cash margin would have been approximately \$-67,556 (once again assume calculation is correct). Peter's change in inventories would still be the same as Table 1 (an increase in inventory of \$91,680), only now his claim year margin would have been \$24,124 for 2003 (cash margin: -\$67,556 + inventory change: \$91,680).

In this scenario there would be no change in the productive capacity of the operation, given he did not hay any extra acres. His original cash reference margin of \$57,094.67 for 2003 and claim year margin of \$24,124 would result in a government-funded CAIS support payment of \$22,950.85. As mentioned previously, baling the extra 500 hay bales resulted in a CAIS claim of \$13,430. Therefore Peter would have received an additional \$9,520.85 of government-funded CAIS support in this instance by purchasing the extra hay vs. baling it himself.

Enhanced CAIS Payments When Purchasing vs. Baling The Feed?

The main reason for the difference in CAIS support when purchasing vs. putting up the additional feed yourself is that a considerable number of costs associated with feed production are non-eligible CAIS expenses. For example, the following expenses associated with feed production are classified as "non-eligible" according to CAIS: machinery repairs, arms length salaries, machinery leases & rentals, land rent, property taxes, soil testing, licenses, insurance, interest, small tools and depreciation. Not to mention many of the other overhead costs such as accounting, office supplies, etc. which are for the most part all non-eligible as well. In contrast, if the feed is purchased the entire purchase price is considered a CAIS eligible expense.

However, the drawback to triggering larger CAIS payments in 2003 is that in future years when 2003 becomes one of Peter's reference years, his cash margin for 2003 will be lower if he purchased the feed, given the \$25,000 extra feed bill is a CAIS eligible expense. If the lower cash margin in 2003 becomes a problem for Peter at a later time, one potential way around this problem would be to switch to filing each of his reference years using the modified accrual accounting option and thus have the \$25,000 hay expense offset with the inventory which remained at year-end.

Closing

Most would agree government-funded programs result in market distortions and consequently altered business decisions. Additionally, it is never assured governments will fulfill their promise to support these programs in their entirety. That being said, the decisions you make in your operation, such as whether to bale or purchase extra feed, do affect the support you will receive from CAIS.

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